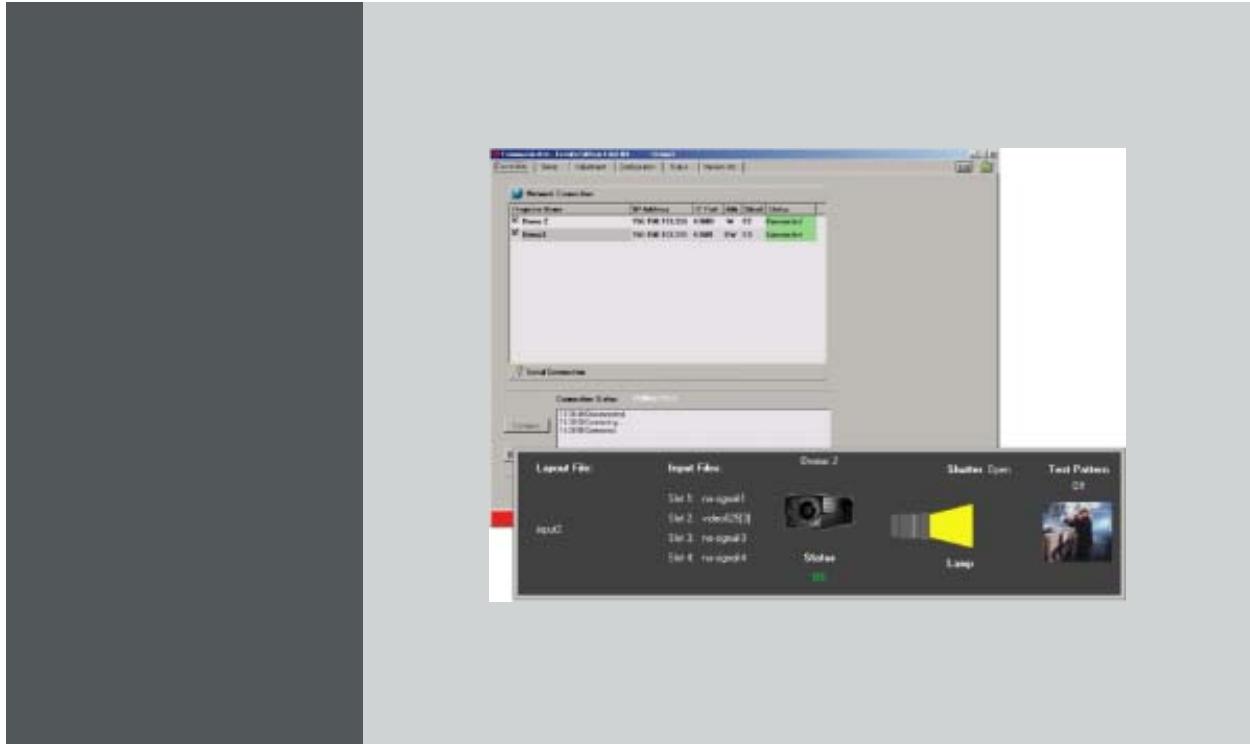


# Communicator



User guide  
Events Edition

R9806075

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# 1. INTRODUCTION

## 1.1 General introduction

### XLM configuration tool

A uniquely powerful and easy to use configuration program for the Barco XLM projector, Communicator, Events Edition, provides all of the tools necessary for the total projector set-up and control. A comprehensive array of easy to access menu pages provide control of the XLM's digital input, output and screen display via a combination of simple buttons and WYSIWYG displays.

### Quick and Easy configuration

Via clearly indicated tab pages for control of Projector Connection, Configuration.

### Total Control






Of the Projector Input selection, alignment and switching, Screen Display output.

With extensive projector Status indication, Lamp run-time register.

### About this manual

This User Guide provides detailed information about the Communicator, Events Edition, features. This guide is designed to be a reference tool in your everyday work with the Communicator.

The following icons are used in the manual :

	Caution
	Warning
	Info, term definition. General info about the term.
	Note, gives extra information about the described subject.
	Tip, gives extra advice about the described subject.

Typography:

- Clickable menu items or buttons are indicated in bold, e.g. **Open**
- A menu window is indicated in italic, e.g. *Measure CLO*.
- Step related notes, tips, warnings or cautions are printed in italic.
- Procedure related notes, tips, warnings or cautions are printed in bold between 2 lines preceding by the corresponding icon.





## 2. SOFTWARE INSTALLATION AND START UP

### Overview

- Required Configuration
- Installing the Software
- Upgrading the Software
- Removing the Communicator software

### 2.1 Required Configuration

---

#### PC requirements

- Windows 2000, Windows NT, Win95, Win98 and WinME
- 266 MHz, 64 MB Ram
- Minimum disk space : 30 MB

### 2.2 Installing the Software

---

#### How to install

1. Insert the CD-ROM in the CD-ROM drive.
2. Is the AutoPlay active on your PC.  
If yes, go to step 6  
If no, from within the Windows environment go to the Start Menu. Choose Run... from the menu and proceed with the next steps.
3. Open windows explorer.
4. Select the CD-ROM drive.
5. Double click 'setup.exe' file.
6. Press **OK** to run the installation.  
Follow the instruction of the Installation shield.
7. The setup program will ask you for to specify an install directory. You can accept the default location or browse to a specific directory. Click **NEXT**.
8. Read the Licence agreement and click **Yes** to continue the installation.

The program will be installed on the PC system and the user will be prompted to ask a icon will be

placed on the desktop 

## 2.3 Upgrading the Software

---

### How to update

1. Download or copy the update zip file locally.
2. Unzip the update file in the communicator install directory..
3. Run *Setup.exe*.  
The windows install shield opens.
4. Click on **Next** to continue.  
The install shield check the PC for an old version of the Communicator software.  
A selection window will be displayed.
5. Select the radio button in front of *Upgrade Software to version xxxx*.
6. Click now **Next**.  
The actual version on the PC will be replaced by the new one.



**See Communicator release notes to find out the differences with previous versions.**

---

## 2.4 Removing the Communicator software

---

### How to remove

1. Run *Setup.exe*.  
The windows install shield opens.
2. Click on **Next** to continue.  
A selection window will be displayed.
3. Select the radio button in front of *Delete the current installed software*.
4. Click on **Next**.  
The software will be removed from the PC.

# 3. PROJECTOR CONNECTION

## Overview

- Introduction
- Network connection
- Serial Network Connection
- Disconnecting from the XLM projector
- Controlling one or more projectors
- Shortcut keys

## 3.1 Introduction

---

### Overview

The Communicator can be connected to the XLM projector in one of the following ways:

- Via an Ethernet connection (network connection)
- Via a serial connection

## 3.2 Network connection

---

### Overview

- Introduction
- Hardware connection
- Add new projector
- Delete a projector
- Edit projector settings
- Making connection
- Selecting the Read-Write projector

### 3.2.1 Introduction

#### Overview

Up to 8 projectors can be added to the list of projectors, and these 8 projectors can be controlled all at the same time. The Communicator can only see the settings of one projector, the master, but it can write to all projectors at the same time. The master projector will be indicated as RW, what means “read/write” projector. All others have the indication W, what means “write”.

To control these projectors, set up first a hardware connection and add the projectors to the list of projectors.

### 3.2.2 Hardware connection

#### Possibilities

Connect port 1 or port 2 to a LAN by using a straight cable or a crossed cable. The connection is a 10/100 baseT.

### 3. Projector Connection

---

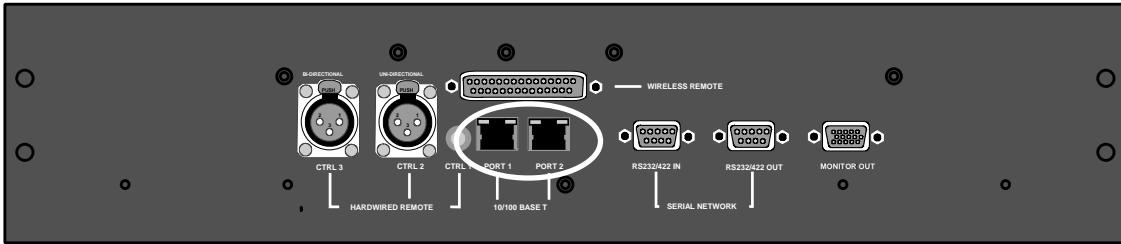


Image 3-1  
Ethernet connection

The projector must have an IP address and the IP address of the connected PC must be within the same range of IP addresses.

#### 3.2.3 Add new projector

##### What can be done ?

Up to 8 projectors can be added to the list. Once added, this projector can be controlled with the Communicator.

##### How to add ?

1. Right click in the projector list pane.

A pop-up window appears (image 3-2)

2. Select **Add projector**.

The projector settings window opens. (image 3-3)

3. Click in the *Projector Name* input field and fill out a name for the projector.

**Note:** The projector name should be unique.

4. Click in the left *IP Address* input field and enter the IP address of the projector.

**Note:** An address contains 4 octets with a maximum value of 255.

5. Click on the *Port Number* drop down box and select the port.

**Note:** The combination IP address and port number must be unique.

Default 43680.

It is possible to enter the same IP address with a different port number. That means that the same projector can be accessed by 2 different Communicator via a different port.

6. If you want to add a short cut for this projector, click on the drop down box and select the desired short cut.

**Note:** The short cut must be unique for each projector.

Short cuts for F1 to F8 can be associated with the projector. When a short cut is associated to a projector, this projector can be selected (as read/write) from any pane in the software.

7. Click **OK** to add the projector.

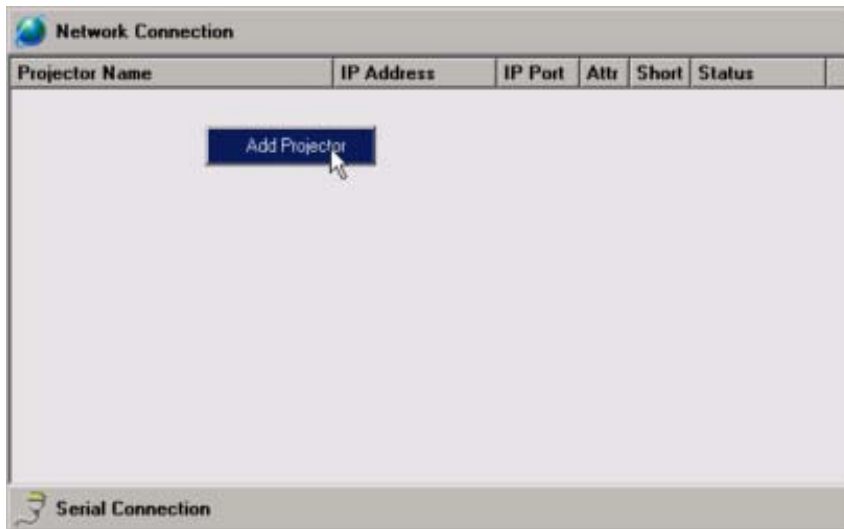


Image 3-2  
Add projector

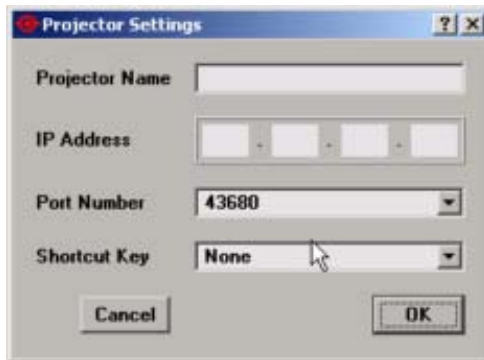


Image 3-3  
Projector settings

### 3.2.4 Delete a projector

#### What can be done ?

Any projector in the list can be deleted out of the list.

#### How to delete ?

1. Right click on the projector which has to be removed.

A pop-up menu appears. (image 3-4)

2. Click on **Delete**.

The projector will be removed from the list.

### 3. Projector Connection

---

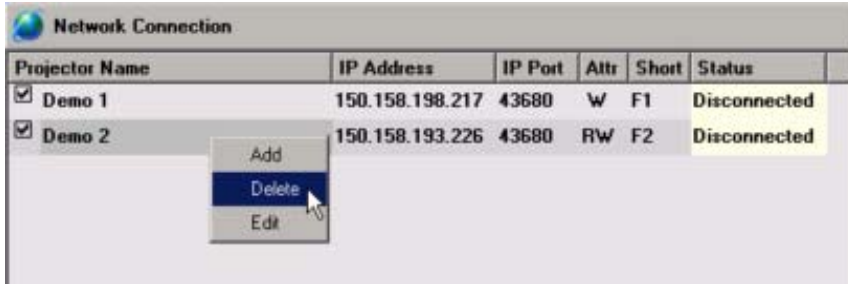


Image 3-4  
Delete projector

#### 3.2.5 Edit projector settings

##### How to edit

1. Right click on a projector name. (image 3-5)
2. Click on Edit.

The projector settings window opens. (image 3-6)

3. To change the name, click in the input field next to *Projector Name* and enter the new name.  
**Note:** *The projector name must be unique in the list of projectors.*
4. To change the IP address, click in the input field next to *IP address* and change to the new value.
5. To change the port number, click on the drop down box next to *Port Number* and select the desired port.  
**Note:** *The combination IP address and Port Number must be unique.*
6. To change the short cut association, click on the drop down box next to *Shortcut Key* and select the new short cut.  
**Note:** *The shortcut should be unique in the list.*

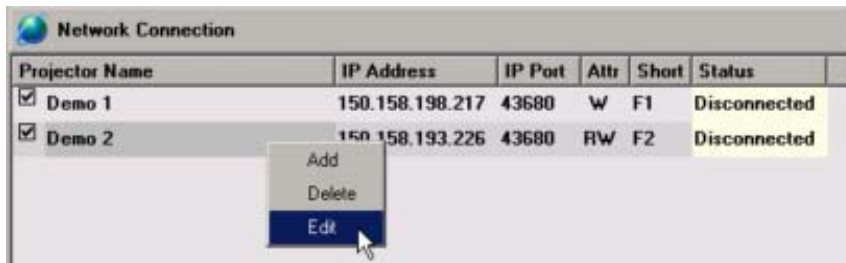


Image 3-5  
Edit projector settings

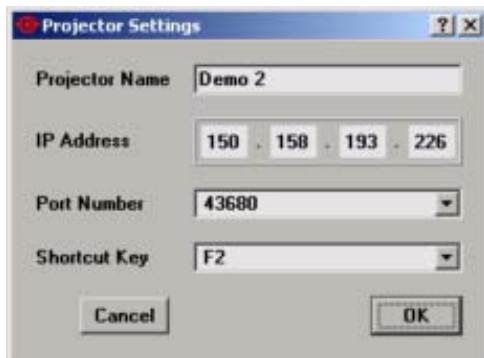


Image 3-6  
Edit projector settings window

### 3.2.6 Making connection

#### What should be done ?

Before a connection can be made with one or more projectors, these projectors should be checked.

#### Making connection

1. Check first the projectors to which the Communicator should make a connection (1). (image 3-7)
2. Click on **Connect** (2).

When a connection is possible, the connection status will change from *Disconnected* to *Connected* (4).

All other tabs of the GUI become enabled and accessible.

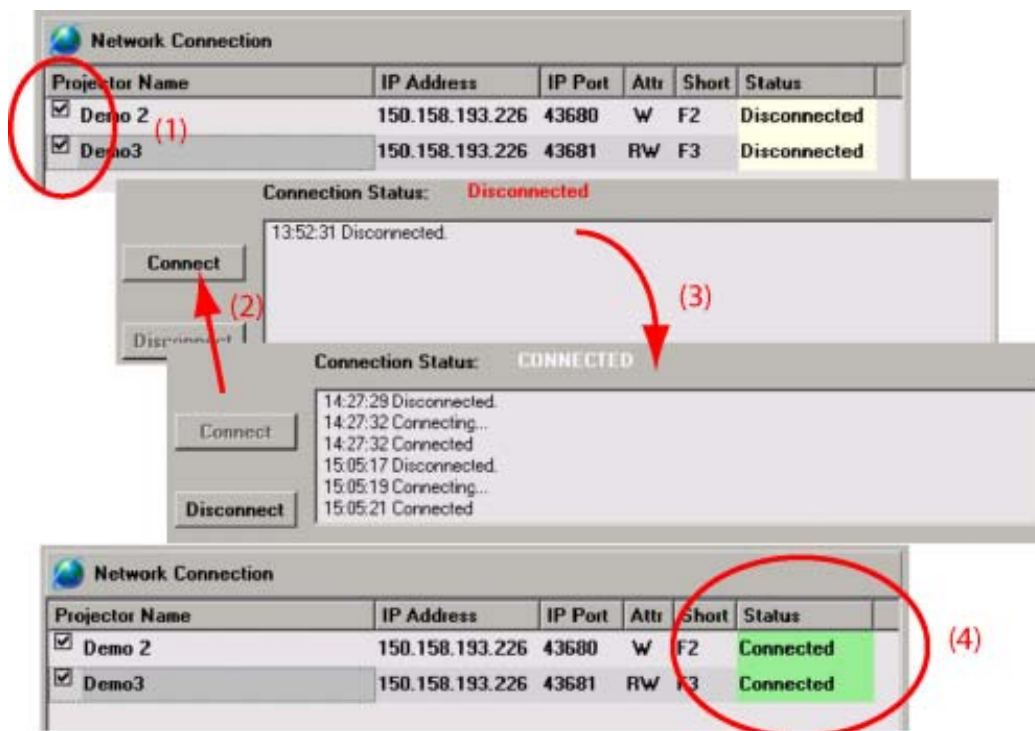


Image 3-7  
Making a connection

### 3.2.7 Selecting the Read-Write projector

#### Read-Write projector

The read-write projector is the projector from which the settings are loaded (monitored) in the Communicator software. These settings can be adapted and used to control all write projectors.

#### How to select ?

1. Click on the name of the projector which must become the read-write projector.

The background changes to dark grey.

## 3.3 Serial Network Connection

#### Physical connection

Connect a serial cable from PC to the RS232IN connector of the projector.

### 3. Projector Connection

---

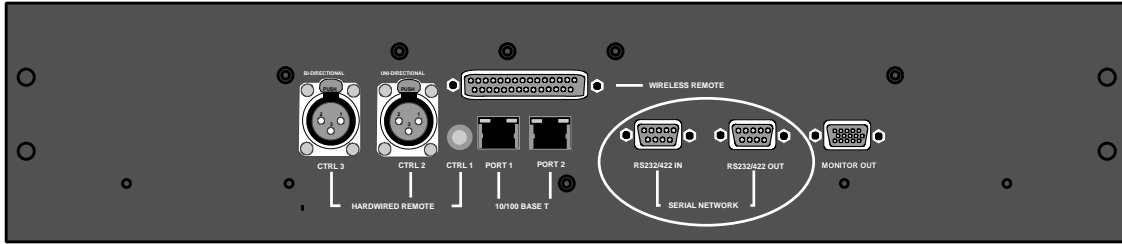


Image 3-8  
Serial connection, physical location

#### Necessary parts

Straight serial cable

#### Software connection

1. Click on the tab button *Serial Connection*.

The tab page opens.

2. Set up the communication port by clicking on the drop down menu (1) and selecting the correct port.
3. Click on the bits per second drop down menu (2) to set up the desired baud rate.
4. Click on the up or down arrows in the projector address menu (3) to set up the desired address.  
Or,  
click on the projector address input field and enter the desired address with the keyboard.
5. Click on Connect

When a connection is possible, connected will be indicated.

All other tabs will become enabled and accessible.

## 3.4 Disconnecting from the XLM projector

---

#### Software disconnection

1. Click on **Disconnect**. (image 3-9)

A disconnect indication will be displayed. (image 3-10)



Image 3-9  
Disconnecting from projector



Image 3-10  
Disconnected from projector



## 3.5 Controlling one or more projectors

### To control only one projector

1. Go to **Connections**, select **Network connections** and check only those projector you want to control.  
Now it is possible to fully control these projector.

### To control different projectors at the same time.

1. Go to **Connections**, select **Network connections** and check those projectors you want to control at the same time.  
All checked projectors can now be controlled.

## 3.6 Shortcut keys

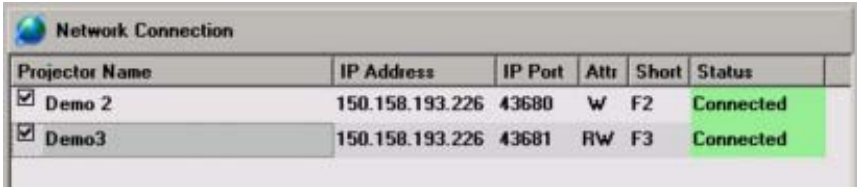
### How to use the shortcut keys ?

Within each pane a projector can be selected by its shortcut.

The selected projector becomes the RW (Read-Write) projector and its name will be displayed in the title bar of the window.

Example:

When e.g. F3 is pressed, Demo 3 projector becomes RW.



Projector Name	IP Address	IP Port	Attr	Short	Status
<input checked="" type="checkbox"/> Demo 2	150.158.193.226	43680	W	F2	Connected
<input checked="" type="checkbox"/> Demo3	150.158.193.226	43681	RW	F3	Connected

Image 3-11  
F3 selected

The name Demo 3 appears in the title bar of any pane.

### 3. Projector Connection

---

## 4. PROJECTOR SETUP

### Overview

- Control Interface Set up
- Internal Patterns Shortcuts
- Lamp ON/OFF
- Shutter Open or Close
- Lens shift
- Lens Focus

### 4.1 Control Interface Set up

#### Overview of the layout

All the settings and setups are visualized in this control interface.

The following is visualized from left to right:

- layout file
- Input files per source
- Name projector with projector logo
- Shutter open or closed
- Lamp on or off : indicated by a light beam. Black means that the lamp is off.
- Test pattern on/off + the name of the test pattern or preview



Image 4-1  
Setup interface

### 4.2 Internal Patterns Shortcuts

#### What can be done ?

A predefined pattern can be set immediately on the projection screen and cleared again.

## 4. Projector Setup

---

### To set a pattern

1. Click on one of the predefined icons. (image 4-2)

The selected pattern will be displayed by the projector when the lamp is on and the shutter is open.  
The following patterns are available:

- Full screen white
- Full screen green
- Color bars
- Focus
- Outline
- Full screen red
- Full screen blue
- CheckerBoard
- Convergence
- Hatch



Image 4-2  
Internal patterns



Command will be send to all write projectors

---

### To clear a test pattern

1. Just click on the **Clear** button.



Command will be send to all write projectors

---


## 4.3 Lamp ON/OFF

---


### What can be done ?

The projection lamp can be switched ON or OFF using the buttons in the software.

### Toggling the lamp status

1. Press lamp on icon (.

The lamp will be switched ON. The interface will indicate lamp ON.

2. Press lamp off icon (.

The lamp will be switched OFF. The interface will indicate lamp OFF.



Command will be send to all “write” projectors

## 4.4 Shutter Open or Close


### What can be done ?

With this function you have full control over the shutter setting. With a single click it is possible to open or close the shutter.

### How to toggle the shutter ?

1. Click on one of the shutter icons to open or close the shutter. (image 4-3)

The status of the shutter is indicated on the interface window.

To open the dowsler, click on the open icon (.

To close the dowsler, click on the close icon (.



Image 4-3  
Shutter



Command will be send to all “write” projectors

## 4.5 Lens shift

### What can be done ?

As the lenses for the XLM projector are motorized, it is possible to adjust these lenses via the Communicator.

The image can be shifted horizontally and vertically.

## 4. Projector Setup

---

### How to shift the image ?

1. To shift the image horizontally, click on the left and right red arrow under *Lens shift*. (image 4-4)
2. To shift the image vertically, click on the up and down red arrow under *Lens shift*.

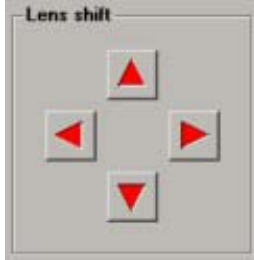


Image 4-4  
Lens shift



Command will be send to all "write" projectors

---

## 4.6 Lens Focus

---

### What can be done ?

As the lenses for the XLM projector are motorized, it is possible to focus these lenses via the Communicator.

### How to focus ?

1. To focus the image, click on the up and down red arrow under *Lens Focus*. (image 4-5)  
Click until the correct focus is obtained.

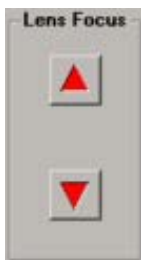


Image 4-5  
Lens focus



Command will be send to all "write" projectors

---

---

# 5. ADJUSTMENT

## Overview

- General introduction
- Create a new layout
- Edit an existing layout
- Renaming a layout
- Deleting a layout
- Windowing
- Settings
- Input slot configuration

## 5.1 General introduction

---

### Overview

With the XLM it is possible to connect up to four sources which can be mixed to one image. Each source is displayed in a separate window on which z-ordering is possible. The window size, timings and other settings can be set up for each source independently.

The result image is internally connected to the projector.



#### Window

A window represents the active area of an input source.

---



#### Layout

A layout is a collection of windows. These windows are placed on a certain position within the screen.

---

## 5.2 Create a new layout

---

### How to create

1. Click on **Layout file** on the menu bar (1). (image 5-1)  
The menu drops down.
2. Select **Open**(1).  
An overview window with the existing layout files will be displayed (2).
3. Select a file out of the list (3) and click **Open** (4) .  
The selected layout will be loaded (5).  
The selected layout will be loaded on all “write” projectors if this file exists locally on that projector.
4. Change this layout to the desired one.
5. Save this layout into a new file by selecting **Layout file** → **Save as**. (image 5-2)  
The current active file will be saved to all “write” projectors.

## 5. Adjustment

6. Click in the *Filename* input field and enter a new name for the layout. (image 5-3)

7. Click on **Save**.

The new layout will be saved.

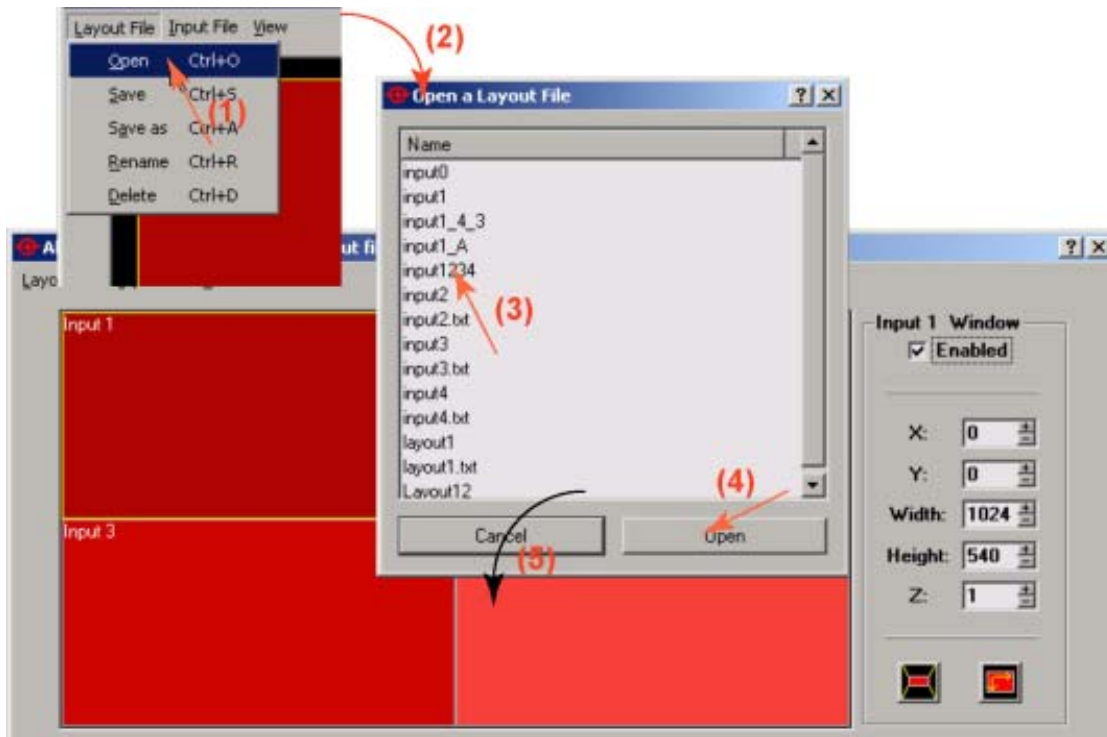


Image 5-1  
Create new layout

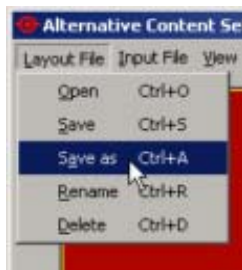


Image 5-2  
Save as layout

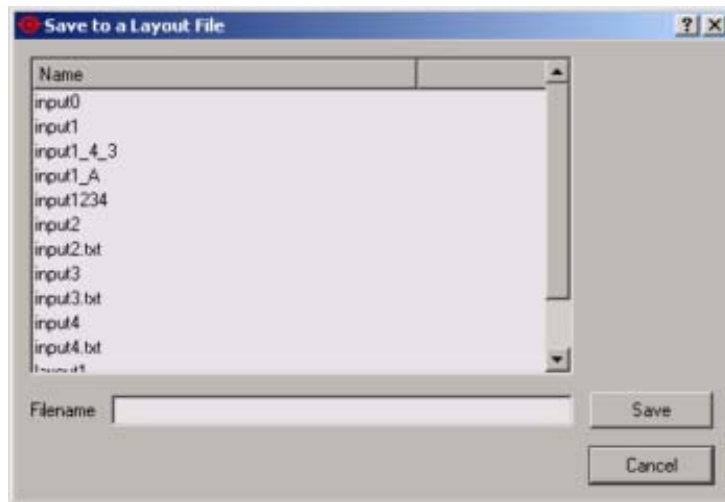


Image 5-3



---

## 5.3 Edit an existing layout

---

### How to edit

1. Click on **Layout file** on the menu bar.

The menu drops down.

2. Select **Open**.

An overview window with the existing layout files will be displayed.

3. Select the file you want to edit out of the list and click **Open**.

The selected layout will be loaded. If this file exists on the other “write” projectors, the layout will be loaded on these projectors too.

4. Edit the layout.

5. Save the layout by selecting **Layout file** → **Save**. (image 5-4)

The layout will overwrite the exiting one.

The current active file will be saved on all “write” projectors.

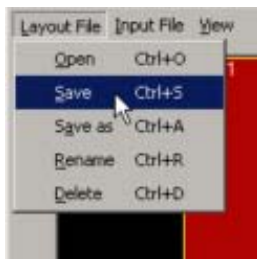


Image 5-4  
Save layout

---

## 5.4 Renaming a layout

---

### How to rename

1. Click on **Layout file** on the menu bar. (image 5-5)

The menu drops down.

2. Select **Rename**(1).

The layout file selection window opens (2).

3. Select the layout file you want to rename (3).

4. Click on **Rename** (4).

The rename window opens (5).

5. Click in the filename input field (6) and enter a new name for the layout.

6. Click on **OK** to rename (7).

The rename will be executed on all “write” projectors if the file exists on the “write” projector.

## 5. Adjustment

---

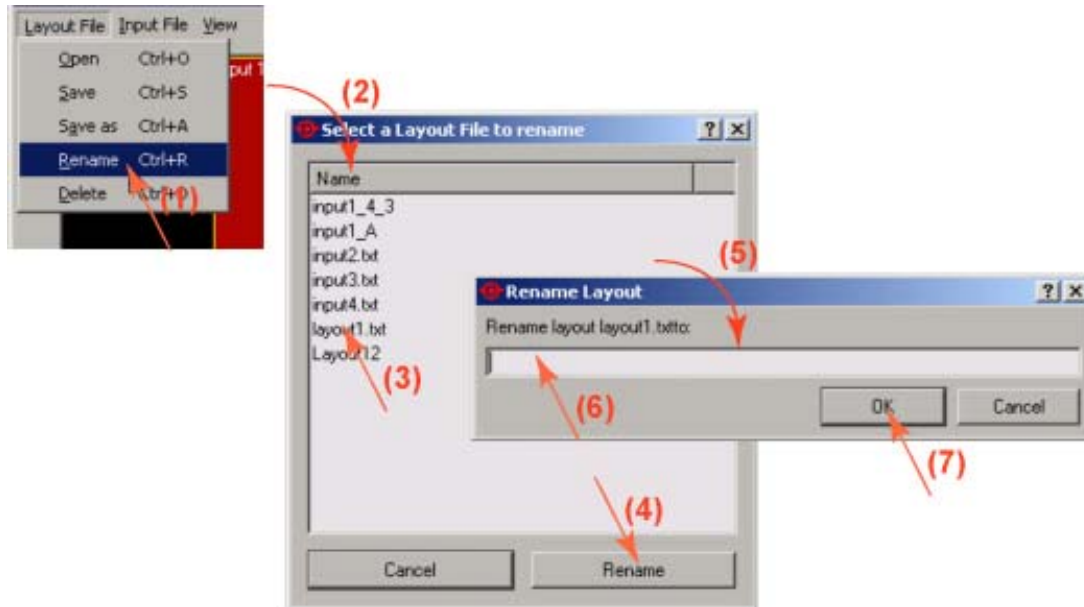


Image 5-5  
Rename layout file

## 5.5 Deleting a layout

---

### How to delete

1. Click on **Layout file** on the menu bar. (image 5-6)  
The menu drops down.
2. Select **Delete** (1).  
The layout file selection window opens (2).
3. Select the layout file you want to delete (3).
4. Click on **Delete** (4).  
The *Delete confirmation* window opens (5).
5. Click on **OK** to delete the file (6).  
Click on **No, cancel this action** to interrupt the deletion process.  
The file will be deleted on all "write" projectors if this file exists on the "write" projector.

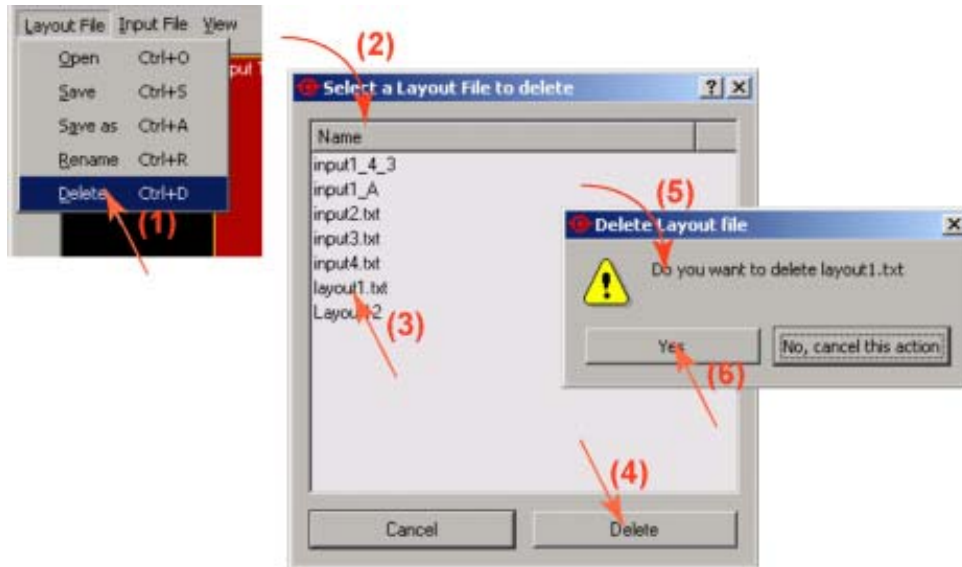


Image 5-6  
Delete layout

## 5.6 Windowing

### Overview

- Window selection
- Enabling or disabling a Window
- Moving Windows
- Scaling Windows
- Z-order
- Full size
- Aspect Ratio



All window manipulations will be executed on all “write” projectors.

### 5.6.1 Window selection



When a certain window is not visible in the layout pane, that means that the window is disabled.



Each input corresponds with one window in the layout pane.

## 5. Adjustment

---

### Using the mouse

1. Move your mouse over the window you want to select.
2. Click with the left mouse button on that window.

The border color changes to yellow. (image 5-7)

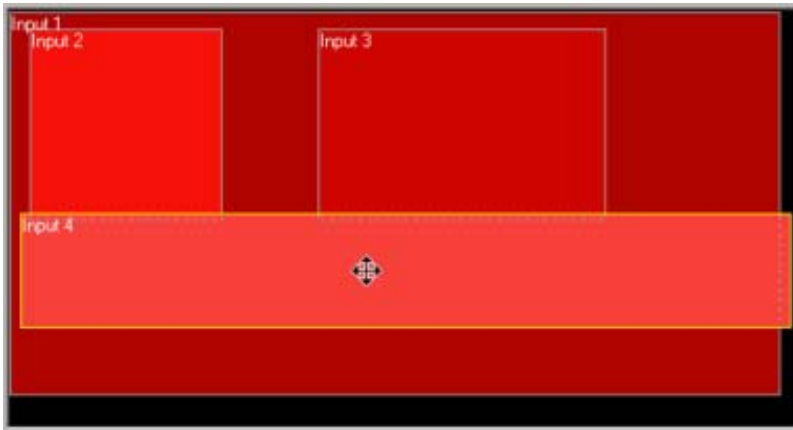


Image 5-7  
Select a window

### Using the menu bar

1. Click **View** to pull down the selection menu. (image 5-8)

The input selection menu opens.

2. Select the window (input) your want to activate.

The border color of the selected window in the layout pane changes to yellow.

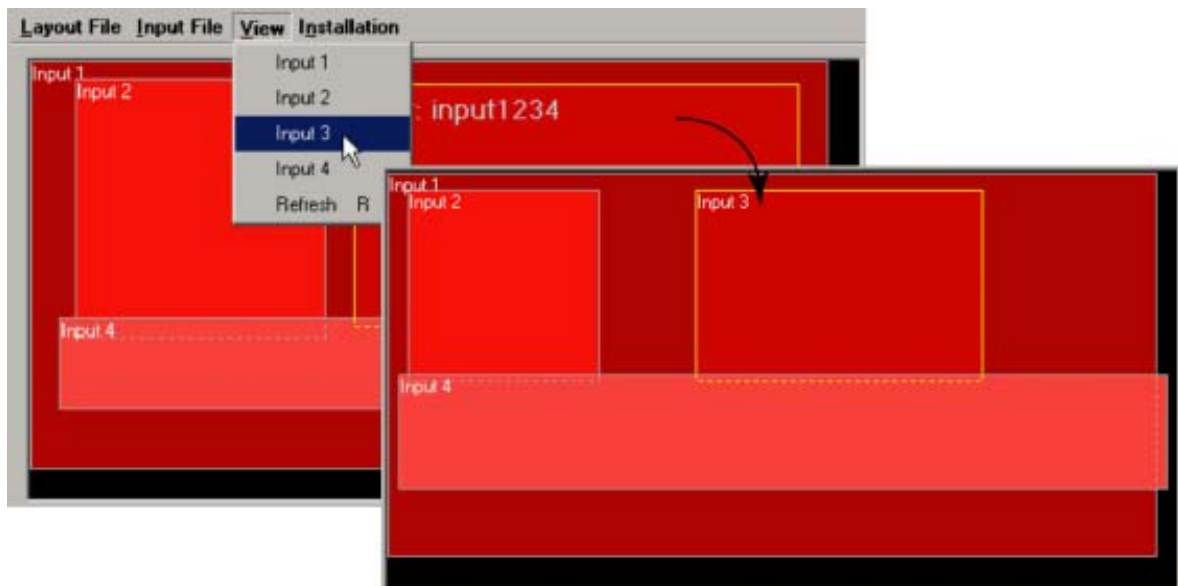


Image 5-8  
Window selection via menu bar

## 5.6.2 Enabling or disabling a Window

### How to disable a window

1. Select the window. (image 5-9)

The border colors will change to yellow

2. Remove the checked symbol next to *enable* by clicking on it.

The window representation will be removed from the layout pane.



Image 5-9  
Disabling a window

### How to enable a window

1. Select the window you want to enable via the menu bar or the function keys. (image 5-10)

The window indication changes to that corresponding window and the enable box is not checked.

2. Check the enable box.

The window representation appears in the layout pane.

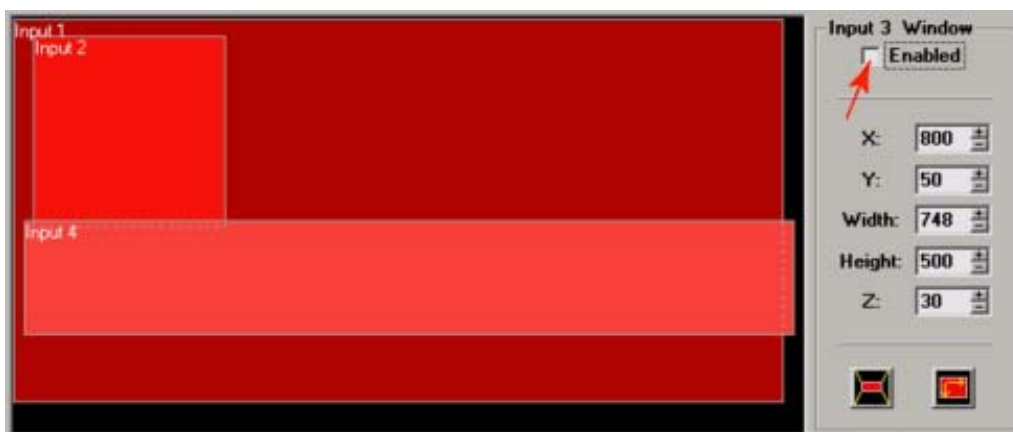


Image 5-10  
Enabling a window

### 5.6.3 Moving Windows

#### Moving via drag and drop

1. Click on the window you want to move. (image 5-11)  
The border changes to yellow and the cursor changes to a four arrow cursor.
2. Hold down the mouse button to grab the selected window.
3. Move the window to the required position. The coordinates in the right pane will change accordingly.

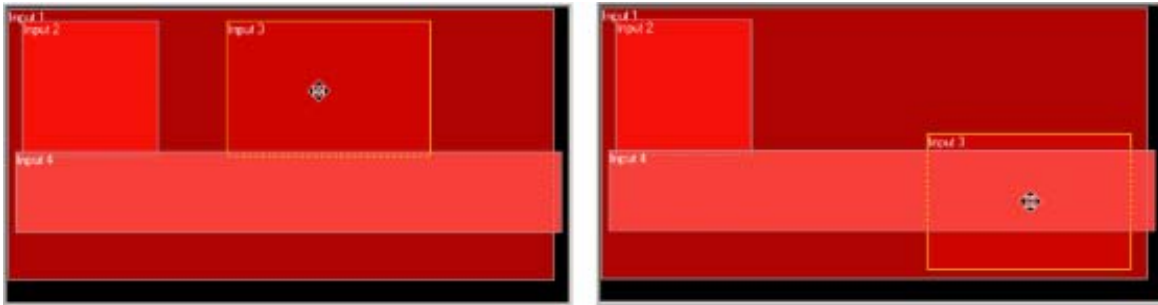


Image 5-11  
Moving windows

#### Moving via the coordinates

1. Select the window you want to move.
2. Change the X and Y value indicating the actual start position of the window by clicking on the + or - keys (image 5-12)  
Or,  
by entering a new value with the keyboard.

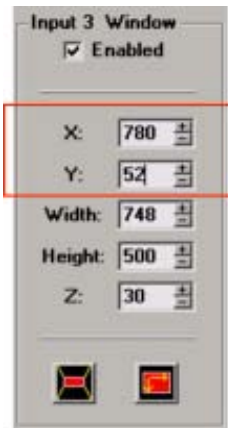


Image 5-12  
Move window via coordinates

## 5.6.4 Scaling Windows

### Scaling via drag and drop

1. Click on the window you want to scale. (image 5-13)  
The border changes to yellow and the cursor changes to a four arrow cursor.
2. Move your cursor to corner.  
The cursor changes in a two arrow cursor.
3. Hold down your mouse button and drag the corner to the desired position to down-scale or upscale the selected window. The coordinates of the selected window will be automatically adjusted in the right pane.

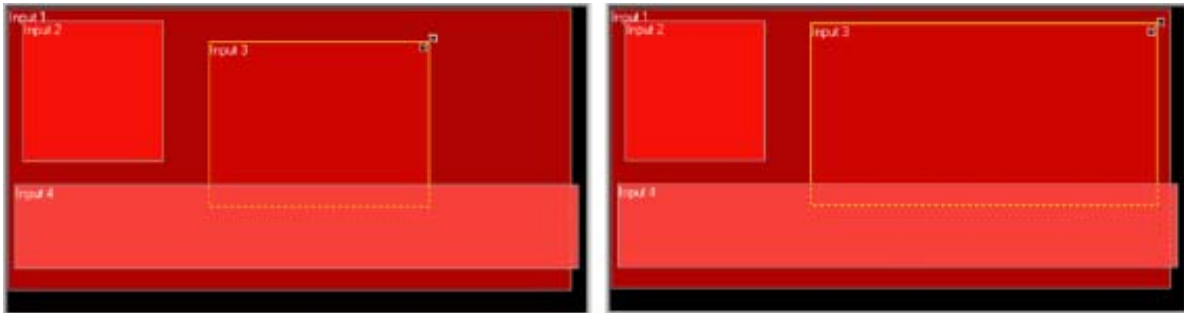


Image 5-13  
Scaling windows via drag and drop

### Scaling via the height and width

1. Select first the window you want to scale. (image 5-14)
2. Change the width and height value by pushing the + or - button  
Or,  
by entering the new values with the keyboard.  
**Note:** The upper left corner is fixed during the scaling.

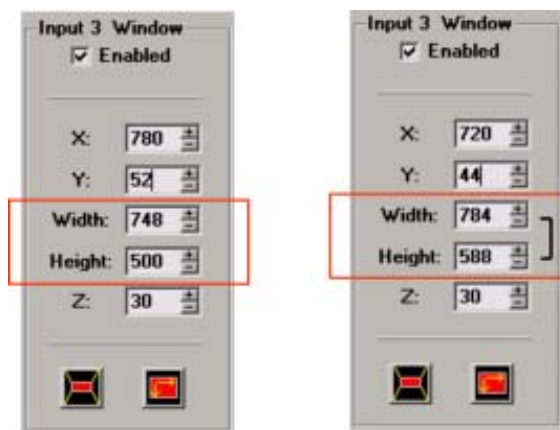


Image 5-14  
Scaling via Width or Height

## 5.6.5 Z-order



### Z-order

The layer sequence in which windows will be displayed in relation to one another.

## 5. Adjustment

---

### How to order

1. Select the window you change the order.  
The border changes to yellow and the cursor changes to a four arrow cursor.
2. Change the Z-value in the right pane by clicking on the + or - button (image 5-15)  
Or,  
by entering the desired value with the keyboard.

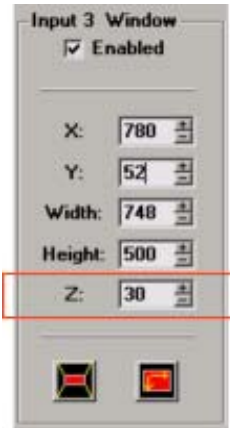


Image 5-15  
Z-order



The higher the value, the more the window is in front.

---

### 5.6.6 Full size

#### How to reset to full size

1. Select the window you want to size to full size. (image 5-16)  
The border changes to yellow and the cursor changes to a four arrow cursor.
2. Click on the full size button. (image 5-17)  
The selected window will be reset to the full size of the DMD.

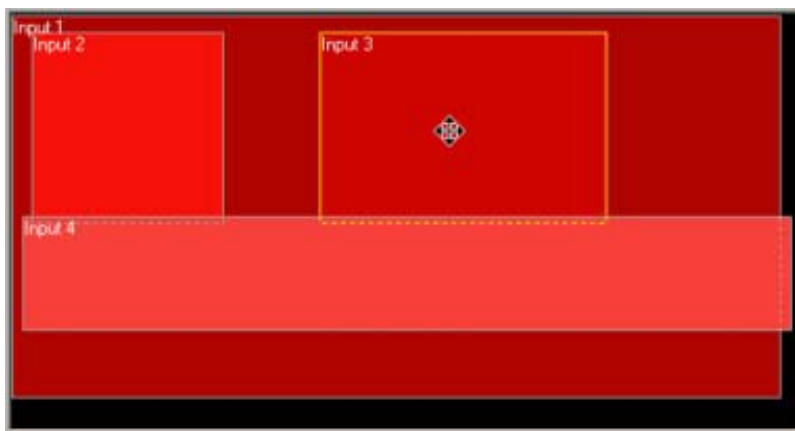


Image 5-16  
Select a window to scale





Image 5-17  
Reset to full size

### 5.6.7 Aspect Ratio



#### Aspect ratio

horizontal & vertical dimension in which the window will be displayed, e.g. 4 by 3 or 16 by 9.

#### How to change

1. Select the window of which you want to change the aspect ratio.  
The border changes to yellow and the cursor changes to a four arrow cursor.
2. Right click on the selected window and select the desired aspect ratio. (image 5-18)  
Or,  
click on the aspect ratio icon and select the desired aspect ratio. (image 5-19)  
Possible aspect ratios

- 3/2
- 4/3
- 14/9
- 16/9
- 21/9
- 1.85 flat
- 2.35 scope
- snap to current : fix the current aspect ratio what ever it is.
- none : no fixed aspect ratio

When a fixed aspect ratio is selected, the width and height will be coupled in the value pane. (image 5-20)

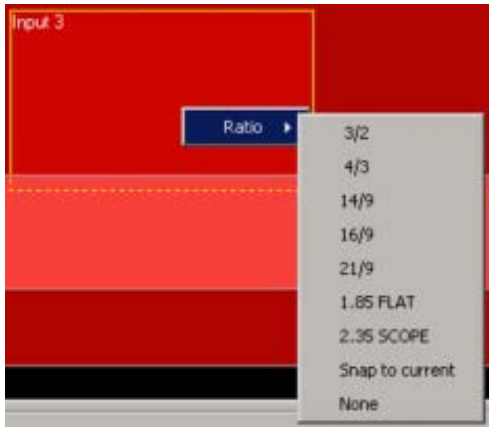


Image 5-18  
Aspect ratio via right click

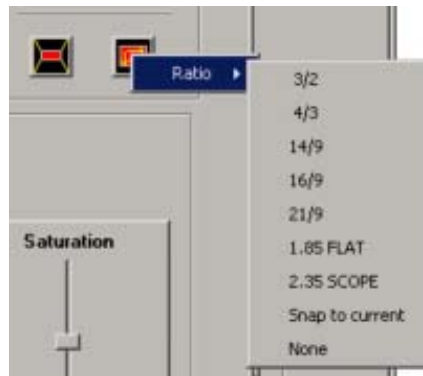


Image 5-19  
Aspect ratio via button

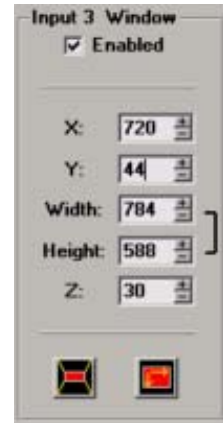


Image 5-20  
Fixed aspect ratio selected

## 5.7 Settings

---



Input File manipulations are not automatically executed on all “write” projectors.

---

### Overview

- Introduction
- Load a file
- Save a file
- Save all file
- Rename a file
- Delete a file
- Auto Load Enabled
- Image Settings
- Input Settings
- Apply settings to all projectors

### 5.7.1 Introduction

#### Overview

With each input source corresponds a source file which contains the settings for this typical source. If there is not yet a source file available, the system can search for the most fitting file or you can associate a file yourself. This file can then be edited and saved under a new name.

#### Types of source files

When opening the list of source files, you will recognize 2 types of source files :

- system source files
- custom source files

The custom source files which have the same name of the system source files are indicated with a index number between brackets.

## 5.7.2 Load a file

### How to load a file

1. Select a window. (image 5-21)

The input number and the associated file name will be indicated in the settings pain.

2. Click on **Input File** on the menu bar and select *Load [All]* (1) or *Load [Fit]* (1). (image 5-22, image 5-23)

The *Open an input file* window opens (2).

When the following is selected :

Load file [All]     All available files will be displayed in the *Open an input file* window.

Load file [Fit]     Only the best fitting files will be displayed in the *Open an input file* window.

Or,

push **CTRL + L** for Load file [Fit] or push **CTRL + S** for Load file [All].

3. Select the desired file (3) and click on **Open** (4).

When a system file is selected, the software will ask to create a custom file with the same name, followed with a next possible index. When **OK** is selected the settings of the system file will be copied into this new file. (image 5-24)

The settings of the selected file will be loaded.

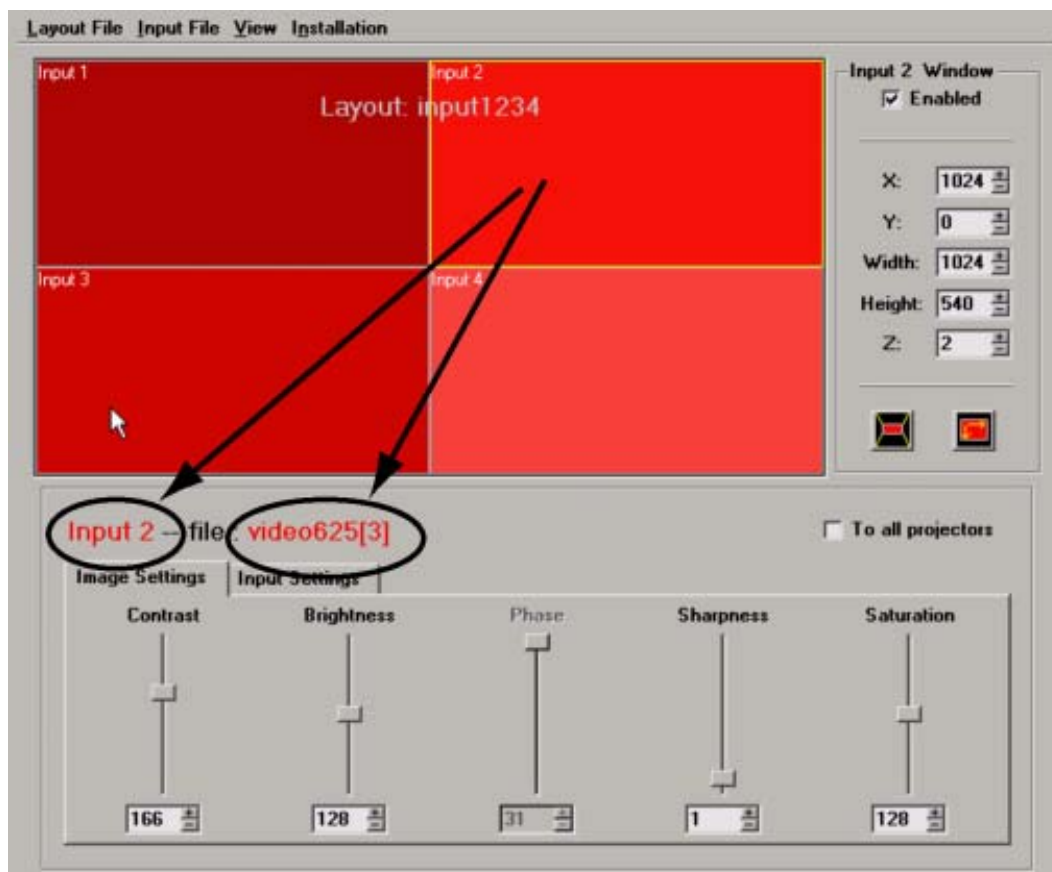


Image 5-21  
File association

## 5. Adjustment

---

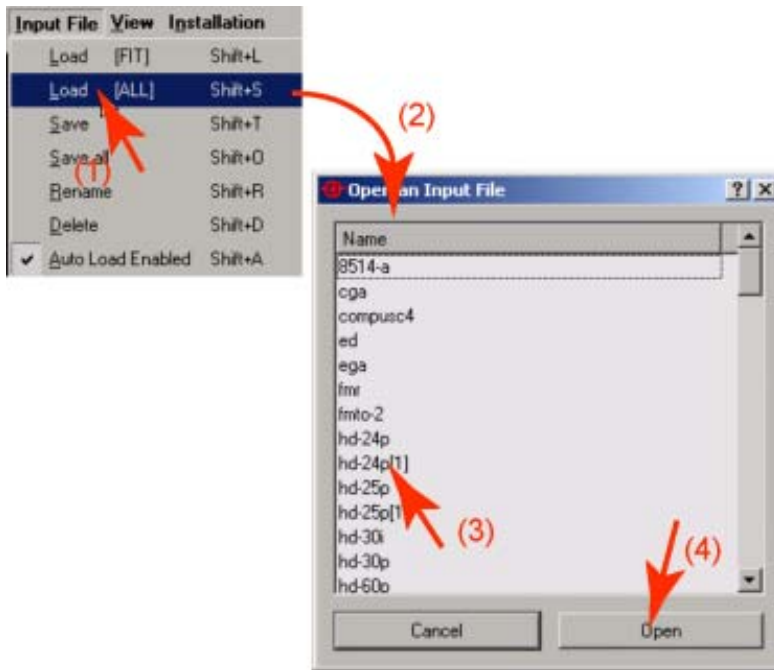


Image 5-22  
Load file [All]

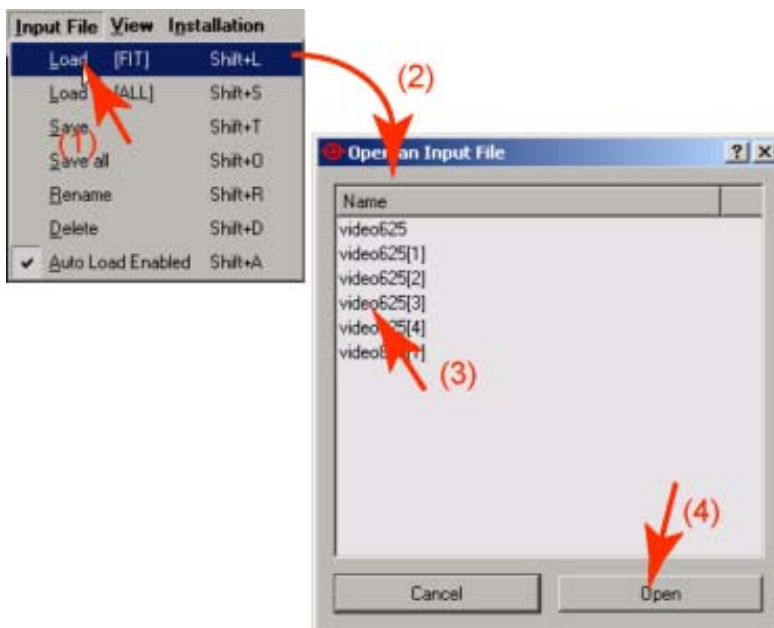


Image 5-23  
Load file [fit]



Image 5-24  
Load file message

### 5.7.3 Save a file

#### How to save

1. Click on **Input File** on the menu bar and select *Save*. (image 5-25)

The settings of the actual input will be saved.

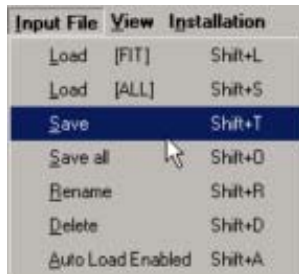


Image 5-25  
Save actual settings

### 5.7.4 Save all file

#### How to save all files

1. Click on **Input File** on the menu bar and select *Save all*. (image 5-26)

The settings of the 4 active input files which are associated with the 4 inputs will be saved.



Image 5-26  
Save all files

### 5.7.5 Rename a file

#### How to rename

1. Click on **Input File** on the menu bar and select *Rename (1)*. (image 5-27)

The *Select Input File to rename* window opens (2).

2. Select a file (3) and click on **Rename (4)**.

The rename window opens (5).

3. Click in the input field (6) and enter the new file name.

4. Click on **OK (7)**.

## 5. Adjustment

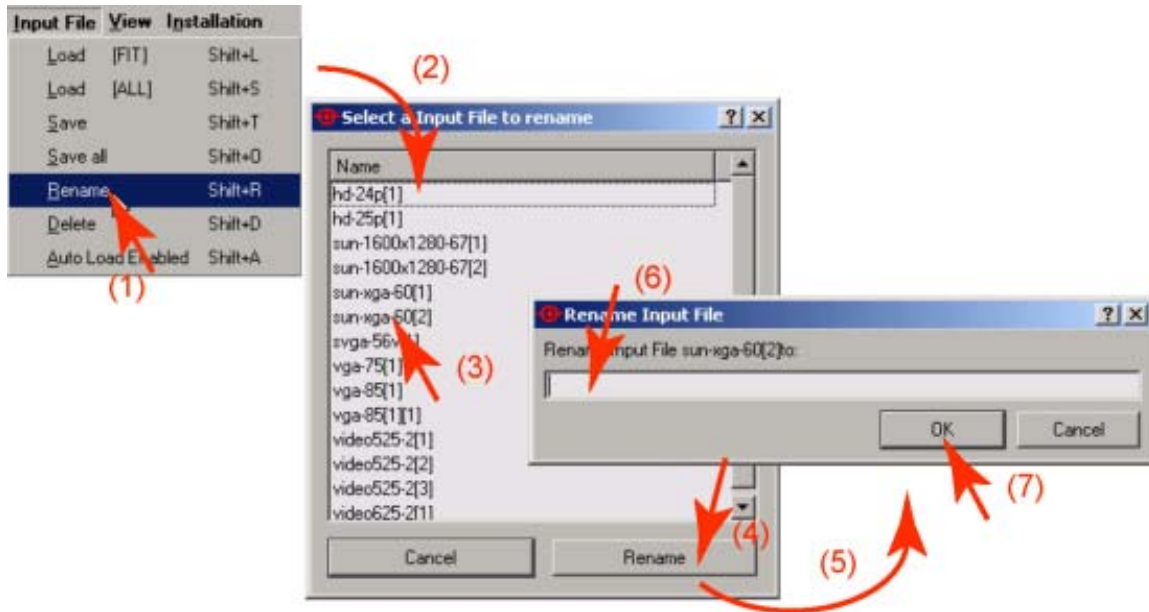


Image 5-27  
Rename input file

### 5.7.6 Delete a file

#### How to delete

1. Click on **Input File** on the menu bar and select *Delete* (1). (image 5-28)  
The *Select Input File to delete* window opens (2).
2. Select an input file (3) and click on **Delete** (4).  
The delete input file confirmation window opens (5).
3. Click **Yes** to delete.

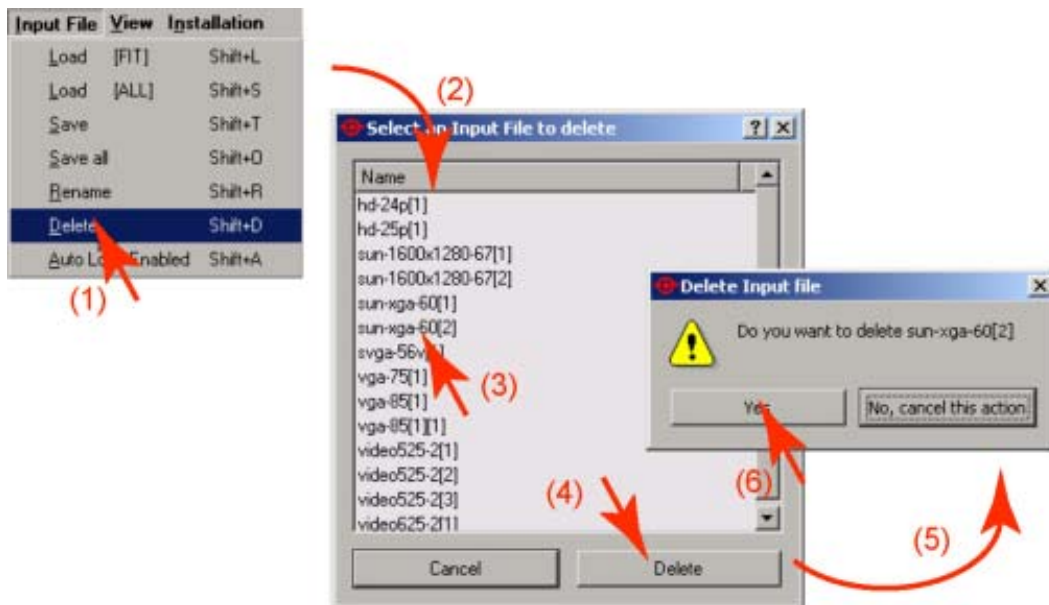


Image 5-28  
Delete input file name

### 5.7.7 Auto Load Enabled

#### What can be done ?

When this function is enabled, the ACSAR 2 will create by itself a new custom file when it detects a relevant input signal.

#### How to enable ?

1. Click on **Input File** on the menu bar and check *Auto Load Enabled* (1).

A check mark will appear in the box just before the *Auto Load Enabled* item.

### 5.7.8 Image Settings

#### Overview

The following image settings can be adjusted depending on the source type :

- Contrast
- Brightness
- Phase
- Sharpness
- Saturation

When a setting is not adjustable, this setting will be grayed out.

#### Adjusting via dragging

1. Click on the slider bar of the specific adjustment. (image 5-29)

The complete slider bar will be selected within a rectangle.

2. Move the slider up or down until the desired value for that specific adjustment is reached.

The value below the adjustment will change accordingly.



Image 5-29  
Adjusting via dragging

#### Adjusting via the up and down keys

1. Click on the up or down arrow keys until the desired value is reached.

The value next to the arrow keys will change accordingly.

#### Adjusting via the input box

1. Click inside the value input box.
2. Select the actual value and enter a new value with your keyboard.

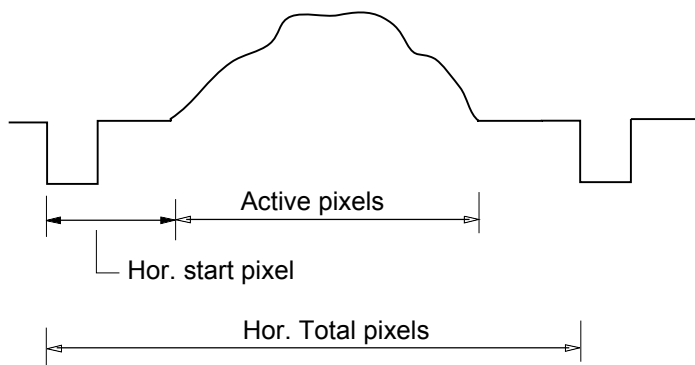
### 5.7.9 Input Settings

#### How to change

1. Click on the Input settings tab.  
The input settings values will be displayed
2. Click in the input field of a setting and change the value with the keyboard.  
Or,  
click on the up or down arrow key to change the value.
3. When the source is Interlaced, check the check box in front of Interlaced.
4. Select Single or dual path.

#### How to find the correct values for the item in the Input File?

Hor. line



Frame

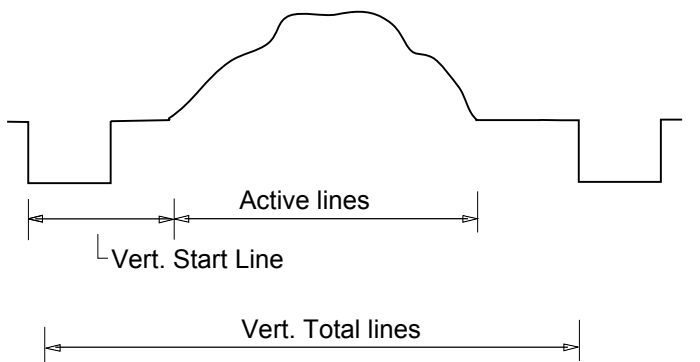


Image 5-30  
Input file items

Horizontal Total Pixels	If the value for "Horizontal Total Pixels" is wrong, sampling mistakes (small vertical bars in the projected image) will be seen in the image. Select "Total" and adjust the pixel quantity. Adjust for zero bars. hint: if the number of bars increase, adjust in the other direction.
Active Pixels	The "Active Pixels" : determine the width of the window on the screen. This value is normally given in the source specifications. If not, adjust until full image is displayed (no missing pixels).
Horizontal Start Pixel	number of pixels between the start of the sync signal and the start of the video information.



Vertical Total Lines	already filled when an active file is selected to be edited
Vertical Active Lines	number of horizontal lines determining the height of the projected image. This value is normally given in the specification of the source. If not, adjust until full image height is displayed (no missing lines)
Vertical Start Line	number of lines between the start of the sync signal and the start of the video information.
Interlaced	this selection is automatically filled out when file has loaded. If the image is wrong due to mismeasurement, check or leave the check box blank before interlace. (for interlaced images, 1 frame contains 2 fields).
Horizontal Period	already filled in with the correct value when active file. Horizontal period = Horizontal Total pixels / clock frequency

### 5.7.10 Apply settings to all projectors

#### Summary

The displayed image settings and input settings of the read-write projector can be applied to all projectors when the other projectors have the same input configuration.

If you want to apply to all projectors, check the checkbox in front of *To all projectors*.

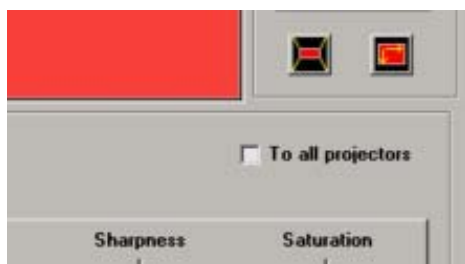


Image 5-31  
To all projectors

A message will be displayed to warn that all projectors must have the same configuration.

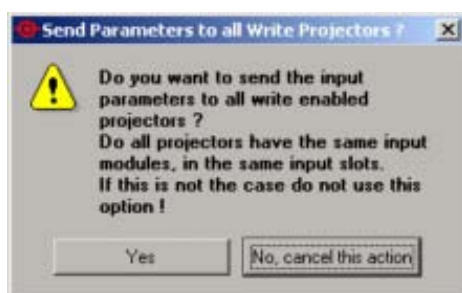


Image 5-32  
"To all projectors" message



**CAUTION: All projectors must have the same input modules, in the same input slots !**

## 5.8 Input slot configuration

---

### What can be done ?

Each of the input slots can be configured with the correct setting.

### How to configure ?

1. Click on **Installation** and select *Input slots*. (image 5-33)

The *Input slots configuration* menu appears. (image 5-34)

2. Click on the drop down box next to the slot which must be configured.
3. Select the desired configuration.

When all configuration are finished, click on **OK**.

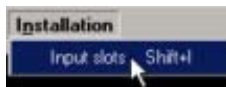


Image 5-33  
Input slots selection

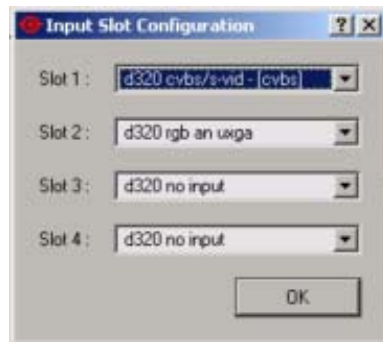


Image 5-34  
Input slots configuration

---

# 6. PROJECTOR CONFIGURATION

## Overview

- Set up of the Serial Bus Address
- Set up of the Network Properties

## 6.1 Set up of the Serial Bus Address

---



Do not change the serial bus address when connected over a serial loop.

---

### How to set up

1. Click on the + or – button next to the address indication. (image 6-1)
2. Click on **Apply now**.

The serial bus address will be set, the Apply now button will gray out.

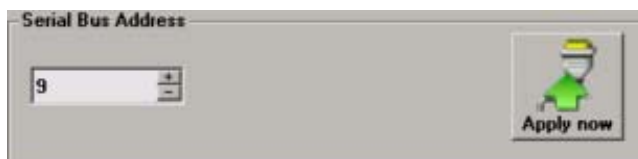


Image 6-1  
Serial Bus Address Setting

## 6.2 Set up of the Network Properties

---

### Overview

- Ethernet Connection
- Assign an Ethernet address via DHCP
- Manually assign an Ethernet address

#### 6.2.1 Ethernet Connection



#### IP

Internet Protocol. The network layer of TCP/IP. Required for communication with the internet.

---



#### Subnet mask

A number that is used to identify a subnetwork so that IP addresses can be shared on a local area network.

---



### Default Gateway

A router that serves as an entry point into and exit point out of a network. For example, a local network (LAN) may need a gateway to connect it to a wide area network (WAN) or to the Internet.

---



### DHCP

Dynamic host configuration protocol. DHCP is a communications protocol that lets network administrators manage centrally and automate the assignment of IP addresses in an organization's network. Using the Internet Protocol, each machine that can connect to the Internet needs a unique IP address. When an organization sets up its computer users with a connection to the Internet, an IP address must be assigned to each machine. Without DHCP, the IP address must be entered manually at each computer and, if computers move to another location in another part of the network, a new IP address must be entered. DHCP lets a network administrator supervise and distribute IP addresses from a central point and automatically sends a new IP address when a computer is plugged into a different place in the network.

---

## What should be set up for the Ethernet address

2 ways can be used to assign an address:

- use the DHCP setting so that a automatic address will be assigned.
- Assign manually an IP address, Subnet-mask, default gateway address.
  - Set the IP-Address field to the desired value. This must NOT be 0.0.0.0 for static IP-Address assignment. The IP address identifies a projector's location on the network in the same way a street address identifies a house on a city block. Just as a street address must identify a unique residence, an IP address must be globally unique and have a uniform format.
  - Set the Subnet-Mask as appropriate for the local subnet.
  - Set the Default-Gateway to the IP-Address of the local router (MUST be on the local subnet!) on the same network as this projector that is used to forward traffic to destinations beyond the local network. This must not be 0.0.0.0. If there is no router on the projector's local subnet then just set this field to any IP-Address on the subnet.

### 6.2.2 Assign an Ethernet address via DHCP

#### How to set up

1. Click on the **BARCO** button. (image 6-2)

The *Network settings* window will open. (image 6-3)

2. Check the check box next to *Obtain an IP address automatically (DHCP)*.

This selection will become active. Other selections are grayed out.

3. Click on **OK** to activate.

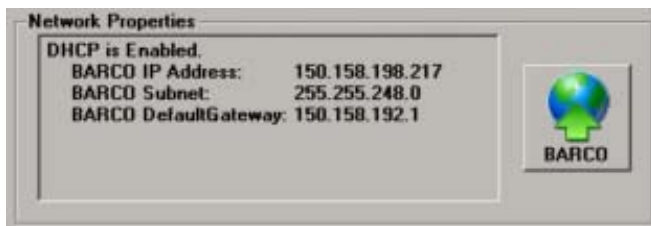


Image 6-2  
Network properties



Image 6-3  
Network settings window, Barco controller

### 6.2.3 Manually assign an Ethernet address

#### How to set up

1. Click on the **BARCO** button.

The *Network settings* window will open. (image 6-4)

2. Check the check box next to *Use the following IP address*

3. Click in the input field of the IP address and fill out the 4 fields.

**Note:** An address contains 4 octets with a maximum value of 255.

*This must NOT be 0.0.0.0 for static IP-Address assignment*

4. Click in the Subnet mask input fields and fill out the 4 fields as appropriate for the local subnet.

5. Click in the Default Gateway input fields and fill out the 4 fields. Set the Default-Gateway to the IP-Address of the router (MUST be on the local subnet!).

**Note:** *This must NOT be 0.0.0.0.*

*If there is no router on the projector's local subnet then just set this field to any IP-Address on the subnet.*

6. Click **OK** to activate.

## 6. Projector Configuration

---

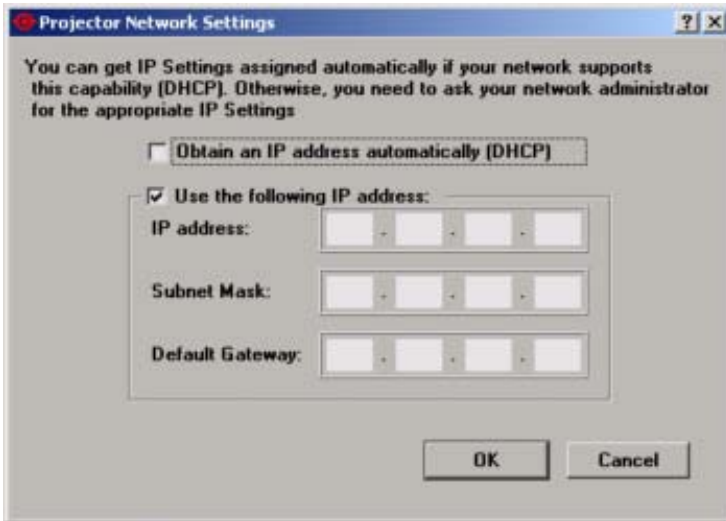


Image 6-4  
Network settings, Barco controller



**If no router is present, then the PC's IP Address MUST be within the same subnet as the projector's IP Address in order for communication to be possible. This requires checking the PC's and projector's Subnet-Mask settings.**

---

### IP address examples

First example

- PC IP Address : 192.168.100.5
- PC Subnet Mask : 255.255.255.0
- Projector IP Address : 192.168.100.3
- Projector Subnet Mask: 255.255.255.0

Result : Communication possible. PC address is in the subnet range of the projector's IP address.

Second example

- PC IP Address : 10.16.236.100
- PC Subnet Mask : 255.255.255.0
- Projector IP Address : 192.168.100.3
- Projector Subnet Mask: 255.255.255.0

Result : No communication possible. PC address is not in the subnet range of the projector's IP address.

Third example

- PC IP Address : 192.168.200.1
- PC Subnet Mask : 255.255.255.0
- Projector IP Address : 192.168.100.3
- Projector Subnet Mask: 255.255.255.0

Result : No communication possible. PC address is not in the subnet range of the projector's IP address. The third group in the PC IP address and Projector IP address must be the same.

Fourth example

- PC IP Address : 192.168.200.1
- PC Subnet Mask : 255.255.0.0
- Projector IP Address : 192.168.100.3
- Projector Subnet Mask: 255.255.0.0

Remark : Communication possible. PC address is in the subnet range of the projector's IP address. The third group in the IP addresses can be any value as the third group in the subnet mask is 0.





# 7. PROJECTOR STATUS

## 7.1 General overview

### Summary

This interface gives feedback on any item that can be red out in the XLM projector.

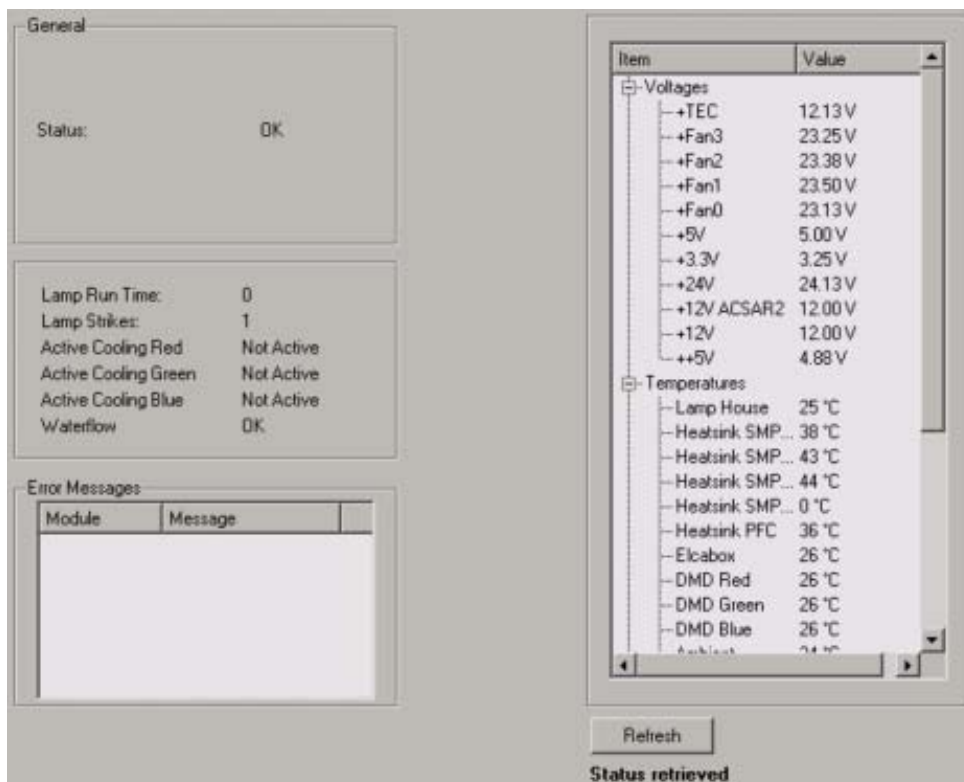


Image 7-1  
Overview status

If the Status indication is NOK, follow the description in the error message window and check the read outs to find out what is wrong with your projector.

## 7.2 General projector properties

### Overview



Image 7-2  
Projector properties

## 7. Projector Status

---

- Lamp run time : expressed in hours. Time lamp is running since first start up of this lamp.
- Lamp strikes : number of strikes since first start up of the lamp.
- Active cooling Red (active - not active) : when active, Peltier cooling is activated for Red DMD.
- Active cooling Green (active - not active) : when active, Peltier cooling is activated for Green DMD.
- Active cooling Blue (active - not active) : when active, Peltier cooling is activated for Blue DMD.
- Waterflow : checks if waterflow is possible. See also location waterflow switch.

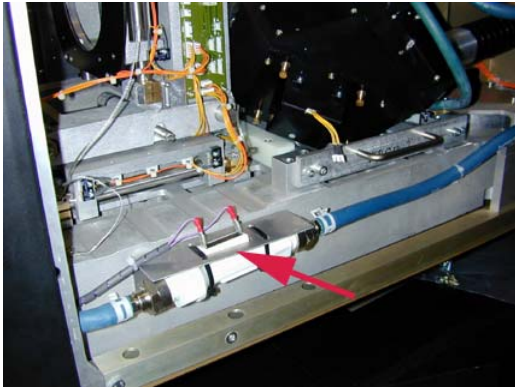


Image 7-3  
Waterflow switch location

## 7.3 Status overviews

---

### Overview

- Voltage statuses
- Temperature statuses
- Fan statuses

### 7.3.1 Voltage statuses

#### Status overview

When one of the voltages are out of specification, the voltage indication will be red.

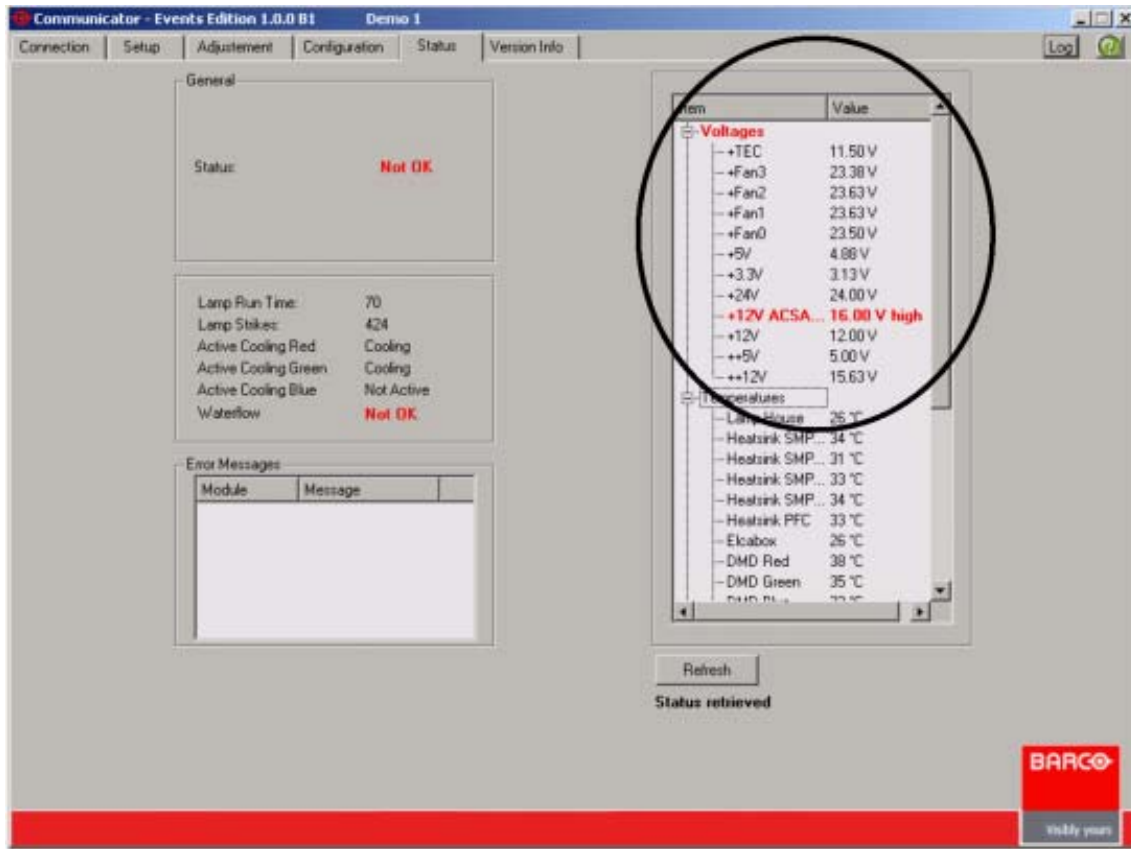


Image 7-4  
Status overview voltages

### 7.3.2 Temperature statuses

#### Status overview

When one of the temperatures are out of specification, the indication will be red.

## 7. Projector Status

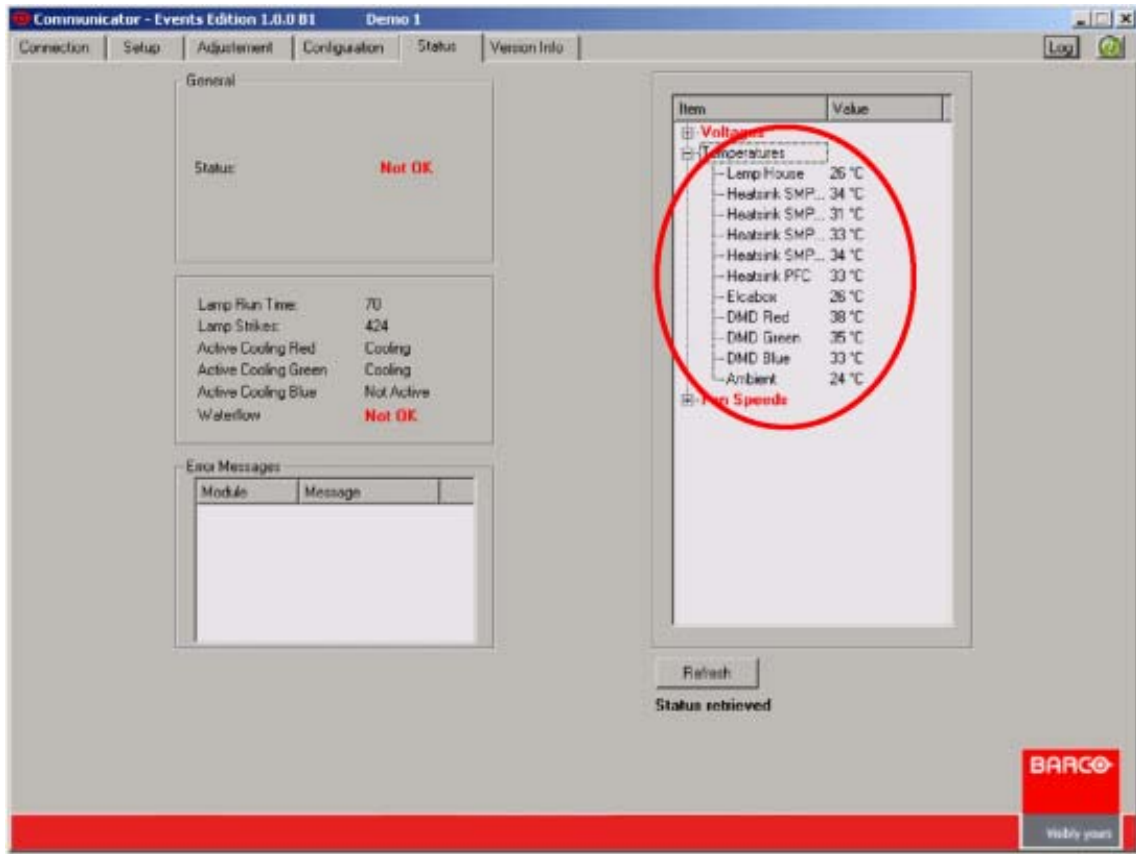


Image 7-5  
Status overview temperatures



**WARNING: Servicing only allowed by a Barco authorized service technician.**

### Sensor locations

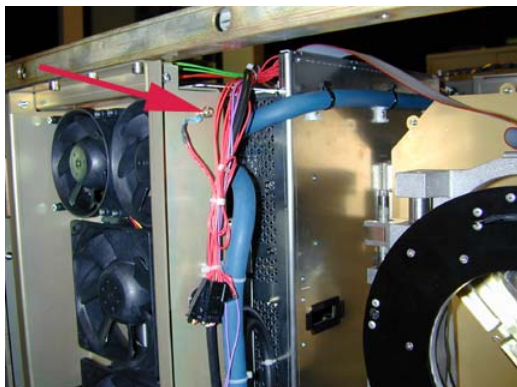


Image 7-6  
Ambient temperature sensor



Image 7-7  
Sensors on modules

- A Sensor on PFC
- B Sensor on heatsink SMPS

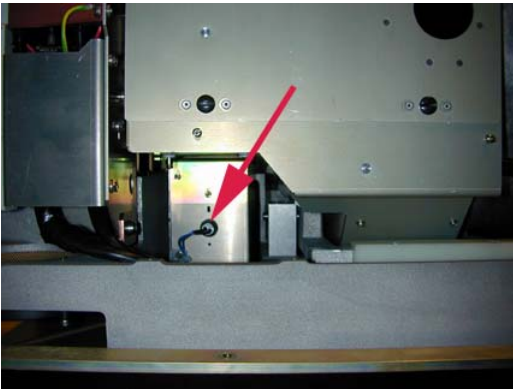


Image 7-8  
Lamp house sensor

### 7.3.3 Fan statuses

#### Status overview

If one of the fans fail, the corresponding indication will be displayed in red.

Communicator - Events Edition 1.0.0 B1 Demo 1

Connection Setup Adjustment Configuration Status Version Info Log

General

Status: **Not OK**

Lamp Run Time: 70  
Lamp Strikes: 424  
Active Cooling Red: Cooling  
Active Cooling Green: Cooling  
Active Cooling Blue: Not Active  
Waterflow: **Not OK**

Error Messages

Module	Message

Item	Value
<b>Voltages</b>	
<b>Temperatures</b>	
<b>Fan Speeds</b>	
- Fan Start Pul...	3590 rpm
- Fan Sealing	6 rpm low
- Fan Lamp ...	6 rpm low
- Fan Lamp ...	6 rpm low
- Fan Lamp ...	6 rpm low
- Fan Cold Miro...	3078 rpm
- Fan Cold Miro...	3078 rpm
- Fan 4 Elcabox	3078 rpm
- Fan 3 Elcabox	3590 rpm
- Fan 2 Elcabox	3078 rpm
- Fan 1 Elcabox	3590 rpm

Refresh

Status retrieved

BARCO

Visible years

Image 7-9  
Status overview fans



**WARNING: Servicing only allowed by a Barco authorized service technician.**

## 7. Projector Status

---

### Fan locations

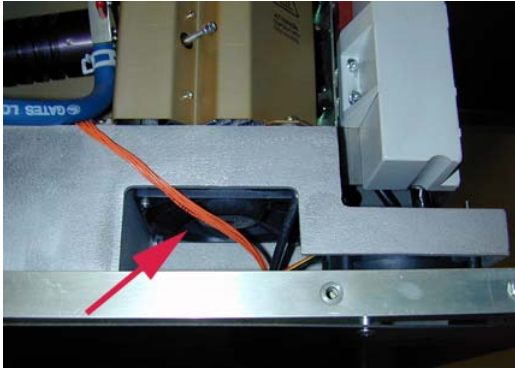


Image 7-10  
Cold mirror bottom fan



Image 7-11  
Cold mirror top fan

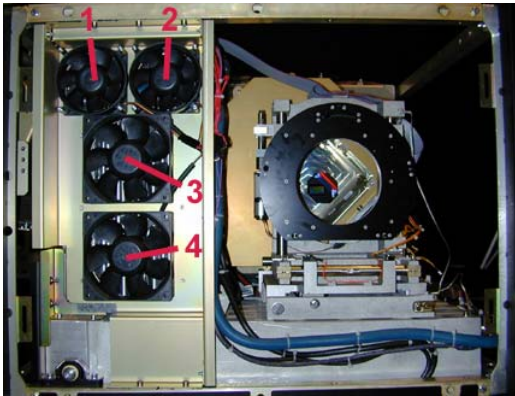


Image 7-12  
Fan 1 - 4 elcabox

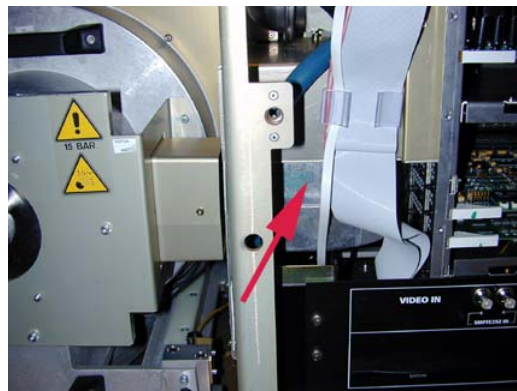


Image 7-13  
Lamp fan cathode



Image 7-14  
Lamp fan anode

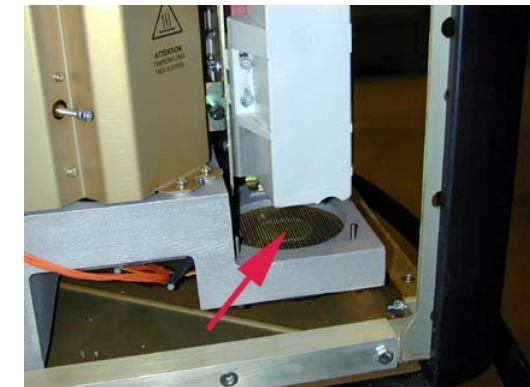


Image 7-15  
Start pulse generator fan

## 7.4 Projector log information

---

### Overview

When clicking on the Log button in the tab bar, a log overview window will be displayed.



Line Nr	Date/Time	Type	Message
00689	ma 5. jul 15.40.28 2004 500 I		Version Ready
00688	ma 5. jul 15.40.25 2004 781 I		Version (Lamp Eeprom Settings) :0.1
00687	ma 5. jul 15.40.25 2004 703 I		Demo 1
00686	ma 5. jul 15.40.25 2004 687 I		Sending RW message with ProjComm
00685	ma 5. jul 15.40.25 2004 687 I		Demo 1
00684	ma 5. jul 15.40.25 2004 671 I		Sending RW message with ProjComm
00683	ma 5. jul 15.40.25 2004 671 I		Demo 1

Image 7-16  
Log information

*7. Projector Status*

---



# 8. VERSION INFO

## Overview

- Version Information

## 8.1 Version Information

### Overview

The version information pane gives an overview of the firmware versions used in the boards.

The following boards are listed:

- Formatter Board
- Modules/Devices
- Settings

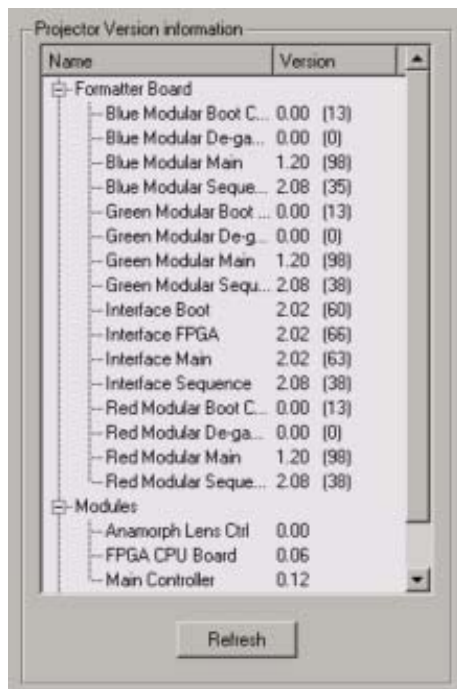


Image 8-1  
Version information



## GLOSSARY

### **Aspect ratio**

horizontal & vertical dimension in which the window will be displayed, e.g. 4 by 3 or 16 by 9.

### **Default Gateway**

A router that serves as an entry point into and exit point out of a network. For example, a local network (LAN) may need a gateway to connect it to a wide area network (WAN) or to the Internet.

### **DHCP**

Dynamic host configuration protocol. DHCP is a communications protocol that lets network administrators manage centrally and automate the assignment of IP addresses in an organization's network. Using the Internet Protocol, each machine that can connect to the Internet needs a unique IP address. When an organization sets up its computer users with a connection to the Internet, an IP address must be assigned to each machine. Without DHCP, the IP address must be entered manually at each computer and, if computers move to another location in another part of the network, a new IP address must be entered. DHCP lets a network administrator supervise and distribute IP addresses from a central point and automatically sends a new IP address when a computer is plugged into a different place in the network.

### **IP**

Internet Protocol. The network layer of TCP/IP. Required for communication with the internet.

### **Layout**

A layout is a collection of windows. These windows are placed on a certain position within the screen.

### **Subnet mask**

A number that is used to identify a subnetwork so that IP addresses can be shared on a local area network.

### **Window**

A window represents the active area of an input source.

### **Z-order**

The layer sequence in which windows will be displayed in relation to one another.



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## Revision Sheet

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Please correct the following points in this documentation (**R5976790/00**):

<b>page</b>	<b>wrong</b>	<b>correct</b>